



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,101	03/02/2004	Kuo-Hsin Su	MR1345-727	1208

4586 7590 10/14/2005

ROSENBERG, KLEIN & LEE  
3458 ELLICOTT CENTER DRIVE-SUITE 101  
ELLICOTT CITY, MD 21043

EXAMINER
----------

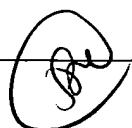
JACKSON, TYRONE D

ART UNIT	PAPER NUMBER
----------	--------------

2862

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,101	<b>Applicant(s)</b> SU ET AL.	
	<b>Examiner</b> Tyrone Jackson	<b>Art Unit</b> 2862	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37.CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: "Fig 1" should be "Fig. 7" on page 1 line 9.

Appropriate correction is required.

### ***Claim Objections***

Claims 1 and 7 are objected to because of the following informalities: The phrase "outpul signal indicative of speed of rotation said annular magnetic" should have the term 'of' in between the terms 'rotation' and 'said'. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguro {5,880,585} in view of Applicant Admitted Prior Art (AAPA).

Regarding claims 1, 7 and 8, Oguro discloses a device used directly with a speedometer (column 1 lines 7-11) that uses an annular magnetic device 6 mounted on a gear shaft for synchronous rotation, and the annular magnetic device having at least

Art Unit: 2862

one magnetic zone (column 4 lines 55-64). The detector taught by Oguro also discloses a circuit board **2** mounted in a receiving chamber **1d** and the circuit board comprises a sensor **3** facing the annular magnetic device and adapted to output an output signal indicative of speed of rotation of the annular magnetic device and the output gear upon running of the motorcycle, and a signal line extended from the sensor and connected to an electronic speedometer at the motorcycle in which the gearbox is installed for transmitting the output signal of the sensor to the electronic speedometer (column 5 lines 46-54). As to the casing fastened to the open chamber of the gearbox, having a countersunk hole fastened to a screw hole with a screw and the provision of a stepped receiving open chamber; the casing and the stepped internal configuration are considered to be routine molded structural features subject to design consideration in the final stages of cover or casing manufacture in the assembly of a final product. Suspending a transmission shaft in a stepped receiving open chamber of a casing would be known to those working in the art and assigned the task of final part assembly resulting in a product with parts needed to fit and operate with some degree of consistency. Further, coupling a transmission drive element to the takeoff of a drive member is well known in the art and used as a conventional way to couple transmission elements to an output gear shaft.

Regarding claims 2 and 9, Oguro discloses an axle bush **1a** within the annular magnetic device **Fig 1**.

Regarding claims 3, 4, 10 and 11, the limitations calling for an "end cap capped to said gear shaft" and "a cover plate fastened to said casing" are considered to be

Art Unit: 2862

nothing more than protective elements used in the final stages of manufacture for cosmetic purposes as well as known protective features to avoid collection of dust and debris within the moving parts of an operating assembly.

Regarding claims 5 and 12, Oguro discloses using a Hall IC as the sensor in the system (column 3 lines 45-46).


Oguro does not disclose the specifics of the speedometer that the detector connects with. The AAPA discloses that a conventional speedometer comprises a gearbox fastened to the front fork of a motorcycle with the gearbox comprising a driven gear rotatable with the wheels of the motorcycle, an output gear meshed with the driven gear and the output gear having a gear shaft (page 1 lines 8-14, Fig. 7). It would have been obvious to one of ordinary skill in the art to implement the device taught by Oguro with the conventional speedometer taught in the AAPA because Oguro disclosed that the rotation detector will transmit a signal to a speedometer (column 1 lines 7-11).

Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguro and the AAPA as applied to the claims above, and further in view of Moyer {4510447}. Oguro does not specifically disclose that the sensor could be a solenoid switch. However, Moyer teaches the interchangeability of Hall ICs and solenoids for use as sensors. It would have been obvious to one of ordinary skill in the art to use a solenoid switch as the sensor in the device taught by Oguro because Oguro taught that the sensor could be anything analogous to a Hall IC (column 3 lines 46) and solenoids are analogous.

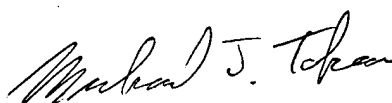
**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 5264791, 4646042 and 4504756 all disclose various types of electrical speedometers.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tyrone Jackson

October 7, 2005

  
Michael Tokar  
Supervisory Patent Examiner  
Technology Center 2800